

CLIMATOLOGICAL DATA FOR NOVEMBER, 1911.

DISTRICT No. 9, COLORADO VALLEY.

FREDERICK H. BRANDENBURG, District Editor.

GENERAL SUMMARY.

Changes in pressure were marked during the first half of the month, and several severe storms crossed the district. During the latter half of the month the pressure was generally high on the west slope of the Continental Divide, and approached the stability that usually marks the beginning of winter in the Colorado Valley. The month was cold, and in many localities in the central and northern parts of the district the mean was the lowest observed in November. Temperatures of zero or lower occurred in Wyoming; at five-sixths of the stations in Colorado; at half the stations in Utah; and at several in New Mexico. In parts of Wyoming the extremes were the lowest of record for November and in parts of western Colorado the lowest in 15 years. On the 11th, near Silverton, Colo., two men lost their lives by freezing. As a whole the month was drier than usual, the Grand Valley alone receiving about the normal precipitation. High winds were common, and severe gales were general on the 10th, 11th, 26th, and 27th.

Progress has been made in repairing the damage to railroads by the floods of October 4 and 5 in the San Juan and Dolores Rivers, the main line of the Denver & Rio Grande Railroad from the east into Durango, Colo., being opened on the 15th and the Farmington, N. Mex., branch on the 21st. The Rio Grande Southern is still closed by the washouts.

TEMPERATURE.

The mean of the 135 stations reporting was 40.4° , or 3.7° below the normal. The mean for November, 1910, was 47.4° . By subdivisions the means and departures were: Western Wyoming, 22.3° , -7.1° ; western Colorado, 28.2° , -4.2° ; eastern Utah, 34.0° , -4.1° ; western New Mexico, 39.4° , -3.6° ; Arizona, 49.8° , -3.2° ; and southeastern Nevada, 44.8° . The highest monthly mean was 63° at Mohawk Summit, Ariz., and the lowest 10.3° at Corona, Colo. The first decade was warmer than the normal in Arizona, while in the central and northern parts of the district days with temperatures below the normal predominated. The remainder of the month was cold, except the 20th and 21st, the deficiencies being marked on the 11th-13th and the last four days in the central and northern parts of the area. The highest temperature, 92° , occurred at Douglas, Ariz., on the 14th, and 90° was reached at three other points in Arizona. The lowest temperature, -33° , occurred at Fraser, Colo., on the 29th. By subdivisions the extremes were: Western Wyoming, 52° at Battle Mountain and -22° at Daniel; western Colorado, 63° at Delta and -33° at Fraser; eastern Utah, 72° at St. George and

-20° at Scofield; western New Mexico, 73° at Lordsburg and -5° at Dulce; Arizona, 92° at Douglas and -5° at Flagstaff No. 2; southeastern Nevada, 76° at Logan and 5° at Caliente.

PRECIPITATION.

The average for the 176 stations reporting was 0.49 inch, or 0.54 inch below the normal. The average for November, 1910, was 1.32 inches. A deficiency was noted on all drainage areas but the Grand. By watersheds the means and departures were: Green, 0.64, -0.17 ; Grand, 1.34, $+0.04$; San Juan, 1.14, -0.20 ; Little Colorado, 0.10, -1.00 ; Gila, 0.05, -0.83 ; Mimbres, trace, -0.52 ; and Colorado proper, 0.06, -0.62 inch. By subdivisions the greatest and least monthly amounts were: Western Wyoming, 1.30 at Daniel and 0.34 at Battle Mountain; western Colorado, 5.55 at Corona and 0.25 at Rifle; eastern Utah, 0.93 at Scofield and none at 2 stations; western New Mexico, 0.42 at Blackrock and none at 9 stations; Arizona, 0.56 at Douglas and none at 44 stations. No precipitation occurred at the stations in southeastern Nevada. Precipitation occurred at some point in Colorado every day except the last two; it was widely distributed from the 5th to 11th and on the 16th and 26th. In the remainder of the district, where precipitation was less frequent, it occurred principally in the first half of the month. Snow fell at a few points in eastern Utah and western New Mexico; it was also reported from all stations in Wyoming and Colorado. In Colorado 16 stations reported monthly amounts exceeding 25 inches, with the maximum fall, 50 inches, at Gladstone in the San Juan Mountains. At the close of the month the average depth on the San Juan and Dolores watersheds was 4.2 inches, average altitude 8,100 feet; Gunnison watershed, 12.6 for 8,900 feet; Grand, 12.9 for 8,700 feet; and Yampa and White, 12.6 inches for 8,100 feet average altitude. In general the snow is not yet hard packed.

The average number of days with 0.01 inch or more precipitation was 5 in western Wyoming; 7 in western Colorado; 1 in eastern Utah; 1 in western New Mexico; and no days in Arizona and southeastern Nevada. For the district as a whole the average was 3 days.

MISCELLANEOUS.

The amount of sunshine reported was as follows: Grand Junction 71 per cent of the possible, Durango 73, Flagstaff 87, Phoenix 89, and Yuma 92 per cent.

The relative humidity was in excess of the average in the northern part of the district. The following values were reported: Grand Junction 64, Durango 64, Flagstaff 58, Phoenix 46, and Yuma 40 per cent.

TABLE 1.—Climatological data for November, 1911. District No. 9, Colorado Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
<i>Wyoming.</i>																					
Battle Mountain.	Carbon.	7,300	12	26.8	- 7.1	52	20	- 15	28	40 ^a	0.34	+ 0.74	0.24	5.5	2	12	7	10	sw.	U. S. Forest Service.	
Daniel.	Uinta.	6,740	2	19.6	48	19 [†]	22	12	44	1.30	+ 0.74	0.30	13.0	7	13	10	7	nw.	J. M. Vandervort.		
Eden.	Sweetwater.	6,577	2	22.7	49	20	- 19	8	48	0.21		0.15	2.5	2	11	10	9	w.	Eden Valley L. & I. Co.		
Green River.	do.	6,083	6															Geo. H. Maxon.			
Pinedale.	Fremont.	7,167	5	20.4	43	3	- 17	28	39 ^b	0.57		0.23	10.5	6	14	7	7	nw.	U. S. Forest Service.		
Willow Creek Cabin.	do.	7,500	2															Do.			
<i>Colorado.</i>																					
Ashcroft.	Pitkin.	9,483	9	20.1	-	51	20	- 20	26	51	1.59	-	0.40	27.0	11				Dan McArthur.		
Breckenridge.	Summit.	9,536	22	17.5	- 8.9	46	15	- 26	28 [†]	51	0.80	- 0.86	0.25	10.0	5	7	11	12	nw.	Mrs. J. G. Thompson.	
Buford.	Rio Blanca.																	w.	Mrs. H. Genier.		
Cascade.	San Juan.	8,900	4																San Juan W. & P. Co.		
Cedaredge.	Delta.	6,175	13	33.4	- 5.3	58	15	- 1	28	50	0.28	- 0.31	0.10	3.0	3	17	11	2		Harry A. Cobbett.	
Chromo.	Archuleta.	7,500	5																Lawrence Nolan.		
Cochetopa.	Saguache.	9,088	2																Miss Bessie McDonough.		
Colbran.	Mesa.	6,000	18	31.4	- 5.2	54	1	- 4	12	37	1.11	+ 0.12	0.20	13.3	5	10	9	11	sw.	A. A. Wood.	
Columbine.	Routt.	8,766	1																Mrs. M. A. Caron.		
Columbine Ranch.	Delta.	6,925	1																Geo. W. Wade.		
Corona.	Grand.	11,660	4	10.3	-	30	20	- 16	12 [†]	37	5.55	-	0.58	16	2				U. S. Weather Bureau.		
Craig.	Moffat.	27,68																	Joseph F. Haukrich.		
Crawford (near).	Montrose.	6,000	1	30.2		51	15	- 8	12	34	1.06	-	0.33	9.0	8	19	6	5		C. W. Roe.	
Crested Butte.	Gunnison.	8,867	1	17.2		50	21	- 22	29	56	2.60	-	0.85	29.0	5	15	9	6		Charles L. Ross.	
De Beque.	Mesa.	4,935	1	34.2	-	60	1 [†]	- 2	29	39	0.29	-	0.12	1.7	3	17	6	7	w.	O. L. Fairley.	
Delta.	Delta.	4,965	21	34.2	- 3.2	63	6 [†]	- 1	28	47	0.30	- 0.23	0.18	0.5	3	16	8	6		E. M. Getts.	
Dillon.	Summit.	8,800	1																Harry T. Hamilton.		
Durango.	La Plata.	6,534	16	34.0	- 3.2	57	20	- 3	29	34	0.94	- 0.20	0.47	1.3	8	14	10	6	nw.	U. S. Weather Bureau.	
Eureka.	San Juan.	10,000	4																San Juan W. & P. Co.		
Fraser.	Grand.	8,500	2	15.7		46	20	- 33	29	64	2.05	-	0.40	22.0	11	2	5	23	w.	L. D. C. Gaskill.	
Fruita.	Mesa.	4,510	12	34.2	- 3.4	60	6 [†]	- 2	29	37	0.36	- 0.27	0.17	1.5	3	18	8	4		J. B. Willsea.	
Glade Park †.	do.	7,000																	A. F. Terrill.		
Gladstone.	San Juan.	10,400	4																San Juan W. & P. Co.		
Greenwood Springs (near).	Garfield.	5,823	13	32.6	- 1.8	58	6 [†]	- 9	28	47	0.83	- 0.14	0.20	8	7	14	9	5	w.	E. A. O'Neil.	
Grand Junction.	Mesa.	4,608	20	36.2	- 3.7	60	10	- 10	28	30	0.60	+ 0.05	0.36	3.2	4	16	9	5		U. S. Weather Bureau.	
Grand Lake.	Grand.	8,153	3																Mrs. Belle Kauffman.		
Grand Valley.	Garfield.	5,089	19	35.4	- 2.2	62	1 [†]	- 3	29	42	2.37	+ 1.44	1.95	3.5	8	9	12	9		David Evans.	
Gunnison.	Gunnison.	7,670	18																Clarence Adams.		
Hesperus.	La Plata.	8,113																	G. F. Snyder.		
Horseshoe.	Monrose.	8,700	1																Lawrence J. Finch.		
Ironton.	Ouray.	10,000	1																T. Baker.		
Ladore.	Moffat.																		Mrs. Geo. C. Bassett.		
Lake City.	Hinsdale.	8,086	6	23.4	-	51	19	- 16	12 [†]	42	1.37	-	0.35	20.5	9	15	6	9	s.	J. F. Maurer.	
Lay.	Moffat.	6,190	17	26.2	- 4.8	56	3 [†]	- 17	12	47	1.01	+ 0.22	0.53	10.5	7	13	4	13	sw.	A. G. Wallihan.	
Mancos.	Montezuma.	6,960	12	32.0	- 5.5	56	20	- 4	28	37	1.05	- 0.29	0.48	3.0	5	18	8	4	nw.	E. M. Krumanitzky.	
Marble.	Gunnison.	7,951	2	26.2		53	15	- 19	28	61	2.15	-	0.47	25.0	8	19	4	7	ne.	F. E. Morse.	
Marshall Pass.	Saguache.	10,846	8																Wm. L. Williams.		
Meeker (near).	Rio Blanca.	6,182	19	27.4	- 5.7	55	7	- 18	29	43	1.38	+ 0.37	0.49	15.0	6	11	12	7		T. Baker.	
Montrose.	Montrose.	5,811	22	34.9	- 1.1	59	6 [†]	- 1	12 [†]	36	0.46	- 0.09	0.16	2.0	4	17	9	4	w.	U. S. Reclamation Service.	
Nast.	Pitkin.	7,953	1	21.1		49	20	- 20	28	52	1.64	-	0.44	21.0	7	14	6	10		Arthur Hanthorn.	
Pagoda.	Routt.	6,500	20																Mrs. J. W. Scott.		
Pagosa Springs.	Archuleta.	7,108	4	31.8		58 [†]	20	- 1 ^b	12	45 ^b									E. T. Walker.		
Palisades.	Mesa.	4,729		37.8		60	6	10	12 [†]	36	0.55	-	0.18	1.3	5	21	3	5		G. S. Herbolzheimer.	
Paonia.	Delta.	5,694	16	35.2	- 5.1	60	15	- 5	28	34	1.00	+ 0.22	0.30	5.0	7	13	12	5		J. M. Underwood.	
Parshall.	Grand.		2																F. A. Field.		
Pitkin.	Gunnison.	9,500	2																Mrs. Maggie Cammann.		
Pyramid.	Rio Blanca.			26.8 ^a		48 [†]	4	- 15	27	34 ^b	1.95	-	0.27	12.5	6	20	3	7	s.	E. E. Egry.	
Rangely.	do.	5,050	12	32.1	- 1.5	70	3	1	14 [†]	44	0.56	- 0.11	0.50	6.0	2	15	7	15	n.	J. H. McGuire.	
Redcliff.	Eagle.	8,695	18																Dorothea Greiner.		
Rico.	Dolores.	8,824	9																Clinton B. Smith.		
Rifle.	Garfield.	5,437		32.5		59	1	- 3	29	44	0.25	-	0.09	1.5	4	19	2	9	s.	Herman Eiche.	
River Portal.	Montrose.	6,570	5	28.0		56	1	- 9	28	41	1.22	-	0.27	11.2	10	16	5	9	w.	U. S. Reclamation Service.	
Sapinero (near).	Gunnison.	8,125	8	23.4		50	10	- 14	29	36	2.61	-	0.60	29.2	10	16	5	9		W. F. Irving.	
Shoshone.	Garfield.	6,110	1																Central Colo. Pow. Co.		
Silverton (near).	Garfield.	9,400	4	23.2		59	1	- 18	28	61	2.59	-	0.54	36.5	10	9	7	14	sw.	San Juan W. & P. Co.	
Spruce Lodge.	Grand.	9,600	3																H. J. Wills.		
Steamboat Springs.	Routt.	6,683	8	23.2		52	4	- 25	29	45	1.93	-	0.50	43.0	13				M. Elliott Houston.		
Tacoma.	La Plata.	7,300	4																San Juan W. & P. Co.		
Telluride.	San Miguel.	8,758	25.1			55	15	- 16	28	52	3.38	-	0.72	38.0	10	19	3	8	w.	Wm. T. March.	
Terminal Dam.	La Plata.	8,300	4																San Juan W. & P. Co.		
Uncompahgre Plateau.	Montrose.	8,400	1																Martin Esser.		
Yampa (near).	Routt.	8,000	2																Percy A. Hughes.		
<i>Utah.</i>																					
Aneth.	San Juan.	4,600	8	39.5	-	63	10	10	29	33	0.12	-	0.09	0	2	22	5	3	w.	H. R. Antes.	
Bluff.	do.	39.0	0	39.0	-	62	6 [†]	10	29	32	0	-	0	0	0	17	13	0		R. N. Gerry.	
Castle Dale.	Emery.	5,500	12	32.8	- 4.8	68	1	8	11	46	0.10	- 0.87	0.10	1	15	15	0		James Jeffs.		
Cisco.	Grand.	4,447																	John J. Anderson.		
Desert Lake.	Emery.																				
Dragon.	Uinta.	5,700	21	32.8	- 0.9	58	7	- 4	28	54	0	- 0.38	0	0	0	25	3	2	w.	Gilson Asphaltum Co.	
Duchesne.	Wasatch.	5,295	5	53	6	- 5	29	38	0.16										M. M. Smith.		
Elkhorn.	Uinta.	6,657	1																Forest Supervisor.		
Emery.	Emery.	6,200	10	20.9	- 8.0	61	24	5	29	49	T.	- 0.44	T.	T.	0	21	0	9	n.	H. C. Wickman.	
Escalante.	Garfield.	5,700	10																Geo. H. Barney.		
Fort Duchesne.	Uinta.	5,700	21	32.8	- 0.9	58	7	- 4	28	54	0	- 0.38	0	0	0	25	3	2	w.	W. H. Allen.	
Fruitland.	Wasatch.	7,625	1																J. Peter Naab.		
Green River.	Emery.	4,080	10	35.8	- 4.1	67	5	1	29	43	T.	- 0.57	T.	T.	0	21	9	0		Edgar E. Adams.	
Hanksville.	Wayne.	4,200	1	35.4	62	6	-	2	29	48	0.39	-	0.39	0	1	24	5	1	sw.	F. J. Weber.	
Hite.	Garfield.	3,000	10	44.3	- 3.4	60	6	19	29	34	0.15	- 0.79	0.15	T.	1	19	3	2		John P. Hite.	
Kanab.	Kane.	4,925																			

TABLE 1.—Climatological data for November, 1911. District No. 9—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unimpaired.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.		
Utah—Continued.																			
Moab.	Grand.	4,000	22	38.4	— 2.8	66	6	9	29	38	0.21	— 0.49	0.21	1.0	1	11	14	5	nw.
Monticello.	San Juan.	7,545	2	32.0	52	11	— 2	12	37	0.10	0.10	0	1	16	3	11	nw.
New Harmony.	Washington.	.....	.....	.....	.....	.....	.....	.....	.....	0.19	.....	0.10	0	1	.....	.....	.....	.....
Orderville.	Kane.	6,060	1	.....	.....	.....	.....	.....	.....	0.16	.....	0.16	0	2	.....	.....	.....	.....
Pine Valley.	Washington.	6,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Price.	Carbon.	5,557	34.6	.....	62	4	3	28	40	0.01	.....	0.01	0.1	1	23	3	4	se.
Ranch.	Kane.	6,700	9	34.4	.....	60	3	1	12	43	0.10	.....	0.10	1	22	4	4	n.
San Rafael.	Emery.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. George.	Washington.	2,880	21	43.4	— 4.0	72	20	— 6	29	50	0.02	— 0.49	0.02	0	1	21	5	4
Scofield.	Carbon.	7,625	1	23.5	55	1	— 20	28	52	0.03	0.22	16.5	5	17	1	12	s.
Springdale.	Washington.	3,500	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sunnyside.	Carbon.	5,280	6	.....	.....	.....	.....	.....	.....	0.35	.....	0.30	3.5	2	.....	.....	.....	.....
Teasdale.	Wayne.	7,000	3	33.3	.....	60	30	— 1	28	47	0.11	.....	0.07	2	18	0	12	.....
Thompson.	Grand.	5,150	36.8	.....	60	6	7	29	33	0.15	.....	0.15	T.	1	12	17	1	sw.
Tropic.	Garfield.	7,000	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trotter Creek Ranger.	Uinta.	9,200	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vernal.	5,050	15	30.4	— 4.5	57	6	— 1	28	36	0.02	— 0.72	0.01	1.2	2	21	4	5
Woodside.	Emery.	4,045	15	33.6	66	3	0	29	40	0.14	0.14	3.0	1	17	1	12	n.
New Mexico.																			
Alma.	Socorro.	5,500	15	42.6	— 3.4	70	10	4	29	54	0	— 1.15	0	0	0	20	9	1	s.
Aragon.	do.	5,856	4	39.2	.....	67	19	5	20	55	0	.....	0	0	19	9	2	n.
Aztec.	San Juan.	5,590	12	.....	.....	.....	.....	.....	.....	0.21	— 0.25	0.13	T.	2	13	15	2	sw.
Berger's Ranch.	McKinley.	8,000	3	35.5	.....	60	19	2	27	38	0.17	.....	0.05	4.5	5	15	0	w.
Blackrock.	do.	6,500	3	36.3	.....	68	22	1	27	49	0.42	.....	0.21	1.5	3	22	0	w.
Bloomfield.	San Juan.	5,500	16	35.9*	— 3.3	64*	10	3	30	44*	0.41	— 0.12	1.5	4	14	14	2	sw.	
Cambrey.	Luna.	4,215	12	.....	.....	71	10	7	29	45	0.21	— 0.56	T.	T.	0	20	4	w.
Columbus.	do.	4,054	2	.....	.....	72	11	6	29	48	0.00	— 0.52	0.00	0	1	23	2	sw.
Deming.	Rio Arriba.	4,333	34	45.2	.....	72	11	5	29	48	0.00	— 0.52	0.00	0	28	2	0	w.
Dulce.	Grant.	6,756	4	30.2	— 3.0	58	20	— 5	28	44	0.39	— 0.25	0.26	2.0	4	17	3	10	sw.
Fort Bayard.	San Juan.	6,152	36	41.6	— 4.8	64	15	7	29	40	0.10	— 0.67	T.	T.	0	30	0	0	ne.
Fruitland.	Luna.	4,800	18	37.4	— 1.9	63	10	8	28	34	0.25	— 0.08	0.25	T.	1	19	8	3	sw.
Gage.	Grant.	4,486	4	44.2	.....	71	22	8	29	48	0.00	— 0.35	0.00	0	26	4	0	w.
Gila Planting Station.	Grant.	6,475	1	42.2	.....	65	19	7	29	39	T.	.....	T.	0	21	7	2	nw.
Hachita.	do.	4,504	2	71	10	15	29	40	0.19	0.12	T.	0	23	6	1	se.
Haynes.	Rio Arriba.	6,600	1	.....	.....	70	10	9	29	40	0.40	.....	0	1	23	2	5	w.
Hermances.	Luna.	4,451	2	84	20	25	27	52	0.08	— 0.58	0.08	0	1	18	9	3	nw.
Lordsburg.	Grant.	4,245	11	45.2	— 5.4	73	10	9	30	50	0.00	— 0.50	0.00	0	24	4	2	e.	
Luna.	Socorro.	7,300	6	35.2	.....	60	20	— 3	29	51	0.00	.....	0.00	0	19	11	0	w.
Mimbres.	Grant.	5,007	6	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0	24	6	0	nw.	
Pinos Altos (near).	Grant.	7,233	.....	.....	.....	1	29	—	—	—	0.08	.....	0	1	18	9	3	sw.
Pratt.	do.	4,415	2	.....	.....	84	20	25	27	52	0.18	.....	0.18	0	13	13	4	w.
Redrock.	do.	4,150	6	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0	27	3	0	.....	
Rodeo.	do.	4,118	2	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0	27	3	0	.....	
Silver City.	do.	5,800	41.5	.....	64	20	5	29	40	T.	.....	T.	0	20	9	1	E. M. Brumback.	
Arizona.																			
Allaires Ranch.	Cochise.	4,184	15	.....	.....	.....	.....	.....	.....	0.01	— 0.82	0.01	0	1	26	0	4	w.
Alpine.	Apache.	8,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aztec.	Yuma.	492	13	61.1	— 2.4	83	4	31	29	43	0	— 0.86	0	0	0	27	1	2	n.
Benson.	Cochise.	3,525	32	50.4	— 4.8	78	3	24	24	46	0.10	— 0.24	0.10	0	1	20	0	10	w.
Bisbee.	do.	5,500	22	48.6	— 3.5	68	13	22	28	32	0.10	— 0.57	0.10	0	1	19	7	4	e.
Bowie.	do.	3,756	36	50.7	— 1.9	75	5	16	30	44	0	— 0.64	0	0	0	18	11	1	sw.
Buckeye.	Maricopa.	980	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canille.	Santa Cruz.	5,225	2	.....	.....	.....	.....	.....	.....	0.15	.....	0.15	0	1	22	6	2	sw.
Casa Grande.	Pinal.	1,396	29	.....	83	7	.....	.....	.....	0	— 0.55	0	0	0	0	0	0	.....
Casa Grande Ruins.	do.	1,422	3	56.7	84	20	25	27	52	0	0	0	0	22	6	2	w.
Cavecreek.	Maricopa.	1,520	3	54.8	80	20	20	28	48	0	0	0	0	21	9	0
Chin Lee.	Apache.	6,090	3	36.0	63	7	0	28	47	0.05	0.03	T.	2	4	11	15	n.
Chlarsons Mill.	Graham.	8,000	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clifton.	Greenlee.	3,584	20	51.8	— 3.9	73	1	23	29	50	0	— 0.59	0	0	0	29	1	0
Cline.	Gila.	2,300	12	.....	.....	.....	.....	.....	.....	0	— 0.55	0	0	0	0	0	0	.....
Cochise.	Cochise.	4,219	13	47.4	— 4.7	76	17	16	29	53	0	— 0.72	0	0	0	30	0	0	e.
Columbia.	Yavapai.	1,900	11	59.2	— 1.5	80	17	31	29	38	0	— 1.48	0	0	0	28	1	3	se.
Courtland.	Cochise.	4,543	2	66	6	17	30	42	0	0	0	0	27	1	2	e.
Dos Cabezas.	do.	5,250	3	44.1	92	14	14	30	56	0.56	— 0.56	0.01	0	1	26	2	2	sw.
Douglas.	do.	3,930	8	53.7	73	1	26	29	37	0.05	— 1.31	0.05	0	1	20	10	0	se.
Dudleyville.	Pinal.	2,204	21	51.8	— 3.9	77	1	25	29	48	0.02	— 0.95	0.01	0	2	21	6	3	se.
Fairbank.	Cochise.	3,862	1	.....	.....	.....	.....	.....	.....	0.18	.....	T.	1	23	6	1	sw.	
Flagstaff (1).	Coconino.	6,907	19	34.1	— 0.5	62	20	6	29	45	0.20	— 1.20	0.20	T.	1	24	2	4	e.
Flagstaff (2).	do.	7,452	4	61	20	— 5	29	52	0.18	0.18	T.	1	23	6	1	sw.
Florence.	Pinal.	1,504	11	8	25	41	0.03	— 1.11	0.03	0	1	25	4	1	sw.
Fort Apache.	Cochise.	5,200	40	44.0	— 8.6	72	18	10	27	46	0.10	— 0.96	0	0	0	30	0	0	se.
Fort Huachuca.	Maricopa.	5,100	26	44.0	— 8.6	72	18	10											

TABLE 1.—*Climatological data for November, 1911. District No. 9—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Number of rainy days 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direc- tion.	Observers.
				Mean.	Departure from the normal.	Highest. Date.	Lowest. Date.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days 0.01 inch or more.							
Arizona—Continued.																					
Mohawk Summit.	Yuma.	538	12	63.0	— 3.5	82 10	50	19†	26	0	— 0.25	0	0	0	0	21	0	9	e.	Agt. So. Pac. Co.	
Naco.	Cochise.	4,579	1	48.2	—	74 3	22	29	39	0.20	— 0.20	0.20	0	0	1	26	0	4	e.	Agt. E. P. & S. W. Co.	
Natural Bridge.	Gila.	4,990	22	—	—	—	—	—	—	0	— 1.93	0	0	0	0	22	5	3	sw.	D. G. Goodfellow.	
Oracle.	Pinal.	4,500	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	W. H. Winters.	
Osborn.	Cochise.	4,676	2	54.2	—	76 1	25	30	32	0.20	—	0.20	0	0	1	29	0	1	—	Agt. E. P. & S. W. Co.	
Paradise.	do.	5,436	5	44.8	—	72 20	8	28	49	0	—	0	0	0	0	20	9	0	s.w.	J. C. Hancock.	
Parker.	Yuma.	345	14	55.1	— 5.1	84 1†	18	30	53	0	— 0.58	0	0	0	0	30	0	0	—	M. A. Israel, M. D.	
Payson.	Gila.	5,550	3	46.3	—	76 19†	9	29	65	—	—	0	0	0	0	21	0	9	sw.	M. McDonald.	
Phoenix.	Maricopa.	1,108	30	57.6	— 1.1	80 20	30	30	40	T.	— 0.96	T.	0	0	0	24	6	2	e.	U. S. Weather Bureau.	
Phoenix (1).	do.	1,092	21	56.1	— 6.9	82 19	24	30	49	T.	— 0.81	T.	0	0	0	22	6	2	e.	G. Acuff.	
Phoenix (2).	do.	1,189	3	58.5	—	82 19	28	30	43	0	—	0	0	0	0	28	1	1	sw.	Horne & Armstrong.	
Final Ranch.	Pinal.	4,520	17	—	—	—	—	—	—	0.11	—	0.11	0	0	1	29	0	0	—	Iron & Craig.	
Pinto.	Apache.	5,660	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Mrs. C. F. Henning.	
Prescott.	Yavapai.	5,320	44	40.8	— 2.0	69 20	6	29	50	0	— 1.10	0	0	0	0	21	6	3	—	J. W. Flynn, M. D.	
Quartzsite.	Yuma.	800	4	55.2	—	83 7	17	29	47	0	—	0	0	0	0	23	64	0*	w.	W. E. Scott.	
Redrock.	Pinal.	1,864	4	58.0	—	80 1†	28	29	41	—	—	—	0	0	0	24	4	0	—	W. J. Crowell.	
Roosevelt.	Gila.	2,175	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	U. S. Rec. Service.	
Sacaton.	Pinal.	1,280	4	55.6	—	87 20	19	28	58	0	—	0	0	0	0	—	—	—	—	E. W. Hudson.	
St. Johns.	Apache.	5,650	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	A. Shreeve.	
St. Michaels.	do.	6,950	24	36.7	+ 0.9	73 5	2	29†	50	T.	— 0.97	T.	T.	0	0	15	15	0	sw.	Rev. A. Weber, O. F. M.	
Salome.	Yuma.	1,875	4	53.0	—	80 3†	16	29†	50	0	—	0	0	0	0	20	8	2	ne.	Mrs. M. B. Swartz.	
San Carlos.	Gila.	2,456	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	F. S. Thomas.	
San Simon.	Cochise.	3,609	24	55.2	+ 0.2	88 2†	12	30	52	0	— 0.34	0	0	0	0	24	4	2	—	Agt. So. Pac. Co.	
Seligman.	Yavapai.	5,219	5	47.4	—	74 2	28	21	33	0	—	0	0	0	0	26	0	4	sw.	Lib. A., T. & S. F. R. R. Co.	
Sentinel.	Maricopa.	685	13	60.0	— 2.9	79 2†	32	30	40	0	— 0.42	0	0	0	0	27	3	0	—	Agt. So. Pac. Co.	
Silverbell.	Pima.	2,650	6	59.6	—	83 21	35	27†	38	0	—	0	0	0	0	26	0	4	—	Imperial Copper Co.	
Snowflake.	Navajo.	5,644	5	37.6	—	64 16	3	29	48	0	—	0	0	0	0	24	4	2	—	W. J. Flake.	
Springerville.	Apache.	6,862	1	35.3	—	65* 15	3†	26	57	0	—	0	0	0	0	26b	0b	2b	s.	U. S. Forest Service.	
Surpal.	Coconino.	3,200	6	50.0	—	73 6	24	29	35	0	—	0	0	0	0	20	8	2	—	O. C. Upchurch.	
Tempe.	Maricopa.	1,165	7	55.3	—	78 1†	25	30	44	0	—	0	0	0	0	20	10	0	se.	F. H. Simmons.	
Thatcher.	Graham.	2,800	9	50.0	—	77* 1	17	27†	53	T.	—	T.	0	0	0	20	3	1	—	Prof. J. H. Larson.	
Tombstone.	Cochise.	4,550	16	50.8	— 3.6	73 15	21	28†	36	0	— 0.61	0	0	0	0	26	3	1	—	F. N. Walcott.	
Truxton.	Mohave.	3,997	2	46.8	—	73 19†	17	29	46	0	—	0	0	0	0	23	4	3	n.	G. A. Dennis.	
Tuba.	Coconino.	4,500	11	38.9	— 4.5	64 6	9	30	37	0	— 0.69	0	0	0	0	19	7	4	sw.	H. P. Marble.	
Tucson (1).	Pima.	2,390	32	51.0	— 7.3	80* 2	24* 18	39*	50	T.	— 0.88	T.	0	0	0	10	20	0	nw.	University of Arizona.	
Tucson (2).	do.	2,380	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	J. M. Robe.	
Vall.	do.	2,526	1	55.0	—	82 19	24	27	51	T.	—	T.	0	0	0	23	1	6	w.	U. S. C. & G. Sur.	
Walnut Grove.	Yavapai.	3,649	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Agt. So. Pac. Co.	
Wickenburg.	Maricopa.	2,072	13	49.6	— 4.7	80 2	16	23	44	0	— 0.56	0	0	0	0	17	13	0	w.	J. O. Carter.	
Willcox.	Cochise.	4,164	30	46.3	— 5.8	75 14	18	26	50	0	— 0.48	0	0	0	0	19	0	11	n.	Agt. So. Pac. Co.	
Williams.	Coconino.	6,750	12	38.1	— 3.4	67 6†	4	29	53	0	— 1.46	0	0	0	0	22	8	0	—	E. J. Nordyke.	
Winslow.	Navajo.	4,853	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	J. F. Bauer.	
Yuma.	Yuma.	141	32	60.6	— 1.3	84 4	35	29	40	0	— 0.32	0	0	0	0	25	4	1	n.	U. S. Weather Bureau.	
Yuma (1).	do.	150	4	57.7	—	84 4	25	30	48	0	—	0	0	0	0	27	3	0	n.	E. L. Crane.	
Nevada.																					
Caliente.	Lincoln.	4,407	1	38.8	—	72 5	5	29	48	0.00	—	0.00	0	0	0	24	1	5	ne.	Salt Lake Route.	
Logan.	Clark.	1,700	4	50.9	—	76 6	20	29†	43	0.00	—	0.00	0	0	0	23	2	5	n.	R. M. Filcher.	

*, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

‡ Formerly Terrill's ranch.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1911. District No. 9, Colorado Valley.*

TABLE 2.—*Daily precipitation for November, 1911. District No. 9—Continued.*

MONTHLY WEATHER REVIEW.

NOVEMBER, 1911

TABLE 2.—*Daily precipitation for November, 1911. District No. 9—Continued.*

Stations.	Watershed.	Day of month.																													Total.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
<i>Arizona—Contd.</i>																																
Quartzsite	Colorado																															0.00
Redrock	Santa Cruz																														T.	
Roosevelt	Salt																															0.00
Sacaton	Gila																															
St. Johns	L. Colorado																															
St. Michaels	do	T.																													T.	
Salome	Colorado																														0.00	
San Carlos	Gila																															
San Simon	do																														0.00	
Seligman	Verde																														0.00	
Sentinel	Gila																														0.00	
Silverbell	Santa Cruz																														0.00	
Snowflake	L. Colorado																														0.00	
Springerville	do																														0.00	
Supai	Colorado																														0.00	
Tempe	Salt																														0.00	
Thatcher	Gila																														T.	
Tombstone	San Pedro																														0.00	
Truxton	Colorado																														0.00	
Tuba	L. Colorado																														0.00	
Tucson	Santa Cruz																														T.	
Tucson (1)	do																														T.	
Tucson (2)	do																														0.00	
Vail	do																														0.00	
Walnut Grove	Hassayampa																														0.00	
Wickenburg	do																														0.00	
Willcox	Desert																														0.00	
Williams	Colorado																														0.00	
Winslow	L. Colorado																														0.00	
Yuma	Colorado																														0.00	
Yuma (1)	do																														0.00	
<i>Nevada.</i>																																
Caliente	Colorado																														0.00	
Logan	do																														0.00	

* Precipitation included in that of the next measurement.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures at selected stations for November, 1911. District No. 9, Colorado Valley.

Date.	Wyoming.				Colorado.								Utah.								New Mexico.							
	Daniel.		Green River.		Durango.		Grand Junction.		Gunnison.		Meeker.		Steamboat Springs.		Emery.		Fort Duchesne.		Hite.		Moab.		St. George.		Bloomfield.		Fort Bayard.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1.	37	7	—	—	47	30	57	36	54	10	49	16	45	21	50	30	52	26	65	40	60	32	71	33	50	46	62	34
2.	43	2	—	—	43	32	56	35	—	28	46	16	44	21	45	28	51	28	64	37	60	33	71	32	54	30	53	38
3.	40	11	—	—	49	25	56	32	—	19	50	15	48	6	43	27	52	17	63	37	59	31	70	27	53	28	52	32
4.	41	16	—	—	50	22	56	28	—	12	48	18	52	16	45	28	48	18	64	35	61	27	69	26	52	24	50	29
5.	34	10	—	—	46	30	47	36	—	16	44	28	43	26	43	29	55	27	64	41	56	40	71	27	52	29	46	33
6.	32	9	—	—	57	25	59	33	—	24	49	24	42	10	47	28	56	21	69	37	66	47	71	27	55	26	60	34
7.	34	3	—	—	51	25	54	34	—	27	55	20	35	—2	42	26	58	17	63	36	65	47	74	28	50	24	57	33
8.	29	10	—	—	45	34	48	32	—	29	45	24	37	22	41	23	54	20	65	38	57	33	70	30	54	30	59	32
9.	33	15	—	—	53	33	57	34	—	24	52	35	47	20	45	26	56	27	68	37	64	35	69	31	55	30	60	40
10.	34	15	—	—	54	35	60	42	—	26	48	30	46	29	41	22	55	22	67	53	65	35	70	33	64	28	62	41
11.	20	—11	—	—	45	12	42	15	—	26	48	10	43	7	40	20	43	15	53	30	31	27	47	31	37	25	55	40
12.	15	—22	—	—	33	6	30	12	—	10	25	—14	26	—16	31	18	50	4	41	21	34	15	50	17	40	8	58	24
13.	25	15	—	—	48	23	38	20	—	10	28	—2	34	—4	29	15	47	9	46	29	36	22	60	25	48	18	61	26
14.	34	15	—	—	51	26	47	23	—	18	47	16	40	25	27	11	51	10	60	29	51	22	64	20	49	22	52	35
15.	35	15	—	—	53	22	49	23	—	19	54	19	50	13	26	12	52	14	63	29	55	23	65	21	—	—	64	30
16.	31	10	—	—	43	23	48	31	—	6	40	25	41	25	27	17	56	21	56	38	53	36	62	28	—	—	59	34
17.	36	8	—	—	47	22	43	23	39	9	30	0	35	17	29	19	50	18	54	27	49	23	62	21	—	—	53	27
18.	36	15	—	—	46	17	48	23	43	7	44	18	47	22	28	18	46	16	57	27	53	23	63	20	60	17	60	24
19.	48	24	—	—	51	20	52	27	44	10	50	18	43	29	35	19	53	10	59	29	55	23	67	23	60	18	54	23
20.	48	10	—	—	57	25	58	31	47	12	54	20	51	19	40	22	52	15	60	31	56	23	72	22	60	18	64	24
21.	40	3	—	—	55	26	50	25	48	13	54	16	47	4	52	20	51	14	62	30	54	23	67	22	61	18	62	32
22.	34	4	—	—	50	21	48	26	40	10	41	25	32	9	55	19	51	15	56	34	55	28	66	29	61	17	56	28
23.	35	1	—	—	44	19	45	24	43	4	38	4	28	—10	60	11	52	7	55	32	47	22	59	23	—	—	50	28
24.	38	3	—	—	60	17	47	19	40	5	44	8	35	9	61	12	50	12	54	26	48	17	59	14	52	17	57	20
25.	44	4	—	—	49	17	48	23	39	—1	46	7	34	—10	56	15	50	9	54	26	48	17	62	16	49	12	57	20
26.	30	3	—	—	44	18	35	20	36	—2	35	15	29	—5	50	13	48	6	57	25	48	21	66	18	40	16	58	20
27.	26	—12	—	—	31	12	32	15	35	3	22	1	28	10	41	11	50	13	43	30	46	19	58	15	44	16	48	27
28.	24	—20	—	—	30	7	31	10	16	—21	18	—15	17	—5	33	8	50	—4	40	23	35	18	61	15	33	4	38	8
29.	30	—8	—	—	35	3	34	12	21	—16	26	—13	18	—25	30	5	50	0	44	19	36	9	50	6	37	4	39	7
30.	32	0	—	—	43	9	40	10	31	—11	37	—6	30	—15	45	6	50	0	46	20	40	10	55	8	41	10	50	17
Mns.	34.0	5.2	—	—	46.7	21.2	47.2	25.1	—	9.5	42.2	12.5	38.2	8.3	41.2	18.6	51.3	14.2	57.1	31.5	51.4	25.4	63.7	23.1	51.4*	20.4*	55.4	27.9

Date.	Arizona.																Logan, Nev.													
	Bisbee.				Flagstaff.				Fort Apache.				Grand Canyon.				Parker.		Phoenix.		Prescott.		St. Michaels.		Supai.		Tucson.		Yuma.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1.	67	41	53	25	60	34	54	24	84	54	78	50	62	30	59	27	71	48	70	47	81	50	72	47	—	—	—	—		
2.	63	41	47	24	60	32	53	24	84	50	77	49	60	27	51	32	72	45	80	41	82	59	75	43	—	—	—	—		
3.	59	38	54	26	64	29	54	24	83	48	77	56	63	29	54	28	70	44	66	51	83	58	74	45	—	—	—	—		
4.	50	41	55	24	62	30	55	24	84	52	77	51	61	30	56	22	69	40	63	47	84	58	75	38	—	—	—	—		
5.	60	41	53	34	60	30	54	24	82	50	75	53	60	32	73	37	72	42	63	48	81	54	75	36	—	—	—	—		
6.	61	43	60	28	65	32	54	24	84	52	71	49	64	30	56	23	73	44	70	45	78	54	76	37	—	—	—	—		
7.	65	41	55	24	61	34	54	24	83	40	76	49	63	29	56	20	70	45	65	40	84	47	72	37	—	—	—	—		
8.	60	44	49	29	60	31	54	24	84	40	74	48	58	36	51	41	71	44	72	46	78	52	71	38	—	—	—	—		
9.	62	46	47	30	60	30	52	23	83	40	73	53	55	38	53	38	71	47	68	49	79	51	73	38	—	—	—	—		
10.	63	50	46	37	62	29	44	22	70	47	66	52	56	38	55	44	68	36	70	47	79	51	72	37	—	—	—	—		
11.	61	49	37	18	61	26	36	21	65	37	67	44	55	29	47	24	65	46	56	36	71	51	72	36	—	—	—	—		
12.	5																													